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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,315	01/14/2004	Achim Kraiss	13906-136001 / 2003P00591	3518
32864 7590 07/23/2008 FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER WU, YICUN	
			ART UNIT 2165	PAPER NUMBER
			MAIL DATE 07/23/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/757,315	<b>Applicant(s)</b> KRAISS, ACHIM	
	<b>Examiner</b> YICUN WU	<b>Art Unit</b> 2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **III. DETAILED ACTION**

1. Claims 1-15 and 25 are presented for examination.

#### **Remarks**

2. A new Examiner has been assigned to the current case.

Applicant's arguments filed on 3-24-2008 with respect to the rejected claims in view of the cited references have been fully considered but they are moot in view of the new grounds of Rejections.

#### **Claim Objections**

3. Claims 1, 15 and 25 are objected to because of the following informalities: the Examiner is not clear about the meaning:

Applicant claimed: "receive a request for analytical information from a front-end software application... identify, using the request, the at least one second information value after invoking the first execution". Is the process of identifying second information value a part of request from the front end software, or, is this a derived result of the invocation of the first execution process?

Applicant claimed: "provide an output to the front-end software application in response to the request, the output indicating the likelihood of the event occurrence determined using a result from at least one of the first and second executions of the analytical task" Does this mean that the results from analytical task will not always be provided to the front end application that made the request?

Appropriate correction is required.

### **Claim Rejections - 35 USC § 101**

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 1-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed non-statutory subject matter. Claims 1-14 lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material *per se*.

Descriptive material can be characterized as either “functional descriptive material” or “nonfunctional descriptive material.” Both types of “descriptive material” are nonstatutory when claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

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Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because “[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.”).

**Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-15 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated over Tuzhilin et al., (U. S. Patent No. 6,236,978 and Tuzhilin hereinafter).

As to claims 1, 15 and 25, Tuzhilin discloses a computer system to invoke multiple executions of an analytical task and provide an analytical output, in responses to receiving a request for analytical information from a front end software application, wherein the computer system is programmed to:

receive a request for analytical information from a front-end software application(fig. 6a, col. 10, lines 55-62), the analytical information to indicate a likelihood of an event occurrence

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(i.e. estimate. Col. 11, lines 14-25) with regard to an identified entity (i.e. user. Col. 11, lines 14-25), the analytical information to be determined using any of multiple information values that are to be identified as associated with the identified entity (Col. 11, lines 14-25);

use the request to identify at least one first information value of the multiple information values (i.e. the user has purchased a ticket to Paris. Col. 12, lines 4-24);

invoke a first execution of the analytical task by providing the at least one first information value to a first analytical engine (i.e. psa. Col. 12, lines 4-24),

wherein at least one second information value of the multiple information values has not yet been identified (this happens when the state of art information is not received. Examiner notes.) when the first execution is invoked (Col. 12, lines 4-24);

identify, using the request, the at least one second information value after invoking the first execution (i.e. may also receive information that the duty-free shop at Charles de Gaulle airport is having a sale on these new perfumes. Col. 12, lines 4-24);

invoke a second execution of the analytical task (the psa service estimate. Col. 12, lines 4-24) by providing both the at least one first and the at least one second information values to a second analytical engine (Col. 12, lines 4-24 and fig 2-3); and

provide an output to the front-end software application in response to the request, the output indicating the likelihood of the event occurrence determined using a result from at least one of the first and second executions of the analytical task (i.e. Purchasing Recommendation. Col. 12, lines 4-24).

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As to claim 2, Tuzhilin discloses a computer system wherein the first analytical engine and the second analytical engine are located externally from the computer system (fig. 6).

As to claim 3, Tuzhilin discloses a computer system wherein the first analytical engine and the second analytical engine are the same analytical engine (Col. 12, lines 4-24).

As to claim 4, Tuzhilin discloses a computer system wherein the request includes the at least one first information value (Col. 12, lines 4-24).

As to claim 5, Tuzhilin discloses a computer system wherein the request includes the at least one second information value (Col. 12, lines 4-24).

As to claim 6, Tuzhilin discloses a computer system wherein the computer system is programmed to obtain the at least one first information value by invoking an execution of an additional analytical task (Col. 12, lines 4-24).

As to claim 7, Tuzhilin discloses a computer system wherein the computer system is programmed to obtain the at least one second information value by invoking an execution of an additional analytical task (Col. 12, lines 4-24).

As to claim 8, Tuzhilin discloses a computer system wherein the computer system is programmed to obtain the at least one second information value from an additional request that is received from the front-end software application (Col. 12, lines 4-24).

As to claim 9, Tuzhilin discloses a computer system wherein the analytical task is a prediction task, and wherein the first and second analytical engines are prediction engines (Col. 12, lines 4-24).

As to claim 10, Tuzhilin discloses a computer system wherein the computer system is programmed to use the request to identify the first and second prediction engines (fig. 6).

As to claim 11, Tuzhilin discloses a computer system wherein the computer system is programmed to:

invoke the first execution of the prediction task on the first prediction engine by providing the at least one first information value as input into a first data mining model (fig. 2-3);  
and

invoke the second execution of the prediction task on the second prediction engine by providing the at least one first information value and the at least one second information value as input into a second data mining model (fig. 2-3).



As to claim 12, Tuzhilin discloses a computer system wherein the first and second data mining models are a common data mining model, and wherein the first and second data mining models are used by the first and second prediction engines during task execution (fig. 2-3).

As to claim 13, Tuzhilin discloses a computer system wherein the computer system is programmed to automatically send output information generated from the first execution of the analytical task back to the front-end software application (fig. 6a).

As to claim 14, Tuzhilin discloses a computer system wherein the computer system is programmed to automatically send output information generated from the second execution of the analytical task back to the front-end software application (fig. 6a).

**Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yicun Wu whose telephone number is 571-272-4087. The examiner can normally be reached on 8:00 am to 4:30 pm, Monday -Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHRISTIAN CHACE can be reached on 571-272-4190. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Yicun Wu  
Patent Examiner  
Technology Center 2100

July 17, 2008  
/Yicun Wu/  
Primary Examiner, Art Unit 2165